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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,832	03/30/2001	Thomas Tuschl	0399.2008-002	6240

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EXAMINER	
WOLLENBERGER, LOUIS V	
ART UNIT	**PAPER NUMBER**
1635	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	09/821,832	TUSCHL ET AL.	
	Examiner	Art Unit	
	Louis V. Wollenberger	1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *76-78,81,86-88,91,106,108,110,112 and 115-123* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *76-78,81,86-88,91,106,108,110,112 and 115-123* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *11/8/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 8, 2006, has been entered.

Status of Application/Amendment/Claims

Applicant's response, filed November 8, 2006, to the Final Office Action of September 6, 2006, has been considered. Rejections and/or objections not reiterated from the previous office action mailed September 6, 2006, are hereby withdrawn. The following rejections and/or objections are either newly applied or are reiterated and are the only rejections and/or objections presently applied to the instant application.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

With the amendment of 11/8/06, claims 76–78, 81, 86–88, 91, 106, 108, 110, 112, and 115–123 are pending and under examination.

Double Patenting

The list of potentially conflicting applications in this case is considered to be extensive. A sampling of such cases follows. This list may not be exhaustive.

Additional applications and issued patents, which may claim the same or similar subject matter include and which are not addressed below include 10/832,248; 10/638,253; and 10/832,432.

If Applicants are aware of any commonly owned pending applications or issued patents, which are not listed below and which claim conflicting subject matter, it is Applicants' duty to disclose these applications or patents, and to submit an appropriate terminal disclaimer over these applications or patents as pertinent to the instant invention.

Claims 12, 16, 76–78, 81, 86–88, 91, 106, 108, 115–117, and 119-123 remain provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 7, 8, 13, 14, 20, 25, 27 of copending Application No. 10/255,568. Although the conflicting claims are not identical, they are not patentably distinct from each other because the conflicting application claims isolated RNA of from about 21 to about 23 nucleotides that mediates RNA interference of an mRNA to which it corresponds.

Response to Arguments

Applicants request that the provisional rejection be withdrawn and maintained in the later filed case if appropriate.

Applicants' remarks are noted.

MPEP §804, Section I, Part B.1 states in part that "If "provisional" ODP rejections in two applications are the only rejections remaining in those applications, the examiner should withdraw the ODP rejection in the earlier filed application thereby permitting that application to issue without need of a terminal disclaimer. A terminal disclaimer must be required in the later-filed application before the ODP rejection can be withdrawn and the application permitted to issue."

In the instant case, the conflicting applications are effectively filed on the same day. Thus, Application 10/255,568 is not a "later-filed" application.

Moreover, a terminal disclaimer has not been required or voluntarily filed in conflicting application 10/255,568.

Additionally, the instant ODP rejection is not the only rejection remaining in the instant application.

Therefore, the instant rejection is maintained because all claims 1, 4, 7, 8, 13, 14, 20, 25, 27 of copending Application No. 10/255,568 are still pending.

In the instant case, the conflicting applications are not divisional applications of one another. The applications were not filed as the result of a restriction requirement in one or the other. The applications were voluntarily filed as separate applications. Thus, the prohibition against using the '568 Application as a reference against the instant application does not apply.

Accordingly, the instant rejection is maintained.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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Claims 12, 16, 76, 78, 86, 88, 106, 108, 110, 112, 115-118, and 120-123 remain provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over new claims 30–49 of copending Application No. 11/142,866. Although the conflicting claims are not identical, they are not patentably distinct from each other because the conflicting application claims a method for chemically and enzymatically synthesizing nuclease resistant (i.e., stabilized) siRNAs of 19-25 nucleotides that mediate RNA interference.

Response to Arguments

Applicants request that the provisional rejection be withdrawn and maintained in the later filed case if appropriate.

Applicants' remarks are noted.

MPEP §804, Section I, Part B.1 states in part that "If "provisional" ODP rejections in two applications are the only rejections remaining in those applications, the examiner should withdraw the ODP rejection in the earlier filed application thereby permitting that application to issue without need of a terminal disclaimer. A terminal disclaimer must be required in the later-filed application before the ODP rejection can be withdrawn and the application permitted to issue."

Application No. 11/142,866 is a later filed application. However, a terminal disclaimer has not been required or voluntarily filed in conflicting application Application No. 11/142,866. Additionally, the instant ODP rejection is not the only rejection remaining in the instant application.

Therefore, the instant rejection is maintained.

Claim Rejections - 35 USC § 112, first paragraph

The rejection of Claims 81, 91, 115-116, and 120 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement is withdrawn in view of Applicants' amendments to the claims and in view of Applicants' arguments, which are considered persuasive.

Claim Rejections - 35 USC § 102—withdrawn

The rejection of Claims 12, 16, 76-78, 81, 86–88, 91, 106, 108, 110, 112, and 115-123 under 35 U.S.C. 102(b) as being anticipated by Agrawal et al. (WO 94/01550) is withdrawn in view of Applicants' amendments to the claims.

***

The rejection of Claims 12, 16, 76–78, 81, 86–88, 91, 106, 108, 115–117, and 119-123 are rejected under 35 U.S.C. 102(a) as being anticipated by Hammond et al. (2000) *Nature* 404:293-296, as evidenced by Elbashir et al. (2001) *Genes & Development* 15:188-200 is withdrawn in view of Applicants' arguments and in view of the Declaration filed on November 8, 2006, under 37 CFR 1.131, which is sufficient to overcome the Hammond et al. reference.

***

The rejection of Claims 12, 16, 76–78, 81, 86–88, 91, 106, 108, 110, 112, 115–117, and 119-123 under 35 U.S.C. 102(a) as being anticipated by Hamilton et al. (1999) *Science* 286:95-952 is withdrawn in view of Applicants' arguments, which are considered persuasive.

Claim Objections—new

Claim 106 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The claim recites the isolated RNA of any one of claims 76-78, 81, 86-88 and, 91, wherein the isolated RNA is complementary to the mRNA.

The term "complementary to" is often used in the art as relative term, wherein a nucleic acid may have varying degrees of complementarity to, or share a percentage of homology to, another nucleic acid. In the instant case, the term "complementary to" is defined neither by the claim nor the specification in a way that would apprise one of skill of the intended meaning or true scope of "complementary to." The term may be interpreted as meaning 100% complementary to or less than 100% complementary to.

Thus, it is unclear how the structures encompassed by claim 106 differ, if at all, from the structures encompassed by claims 76-78, 81, 86-88 and, 91, which require "sequence correspondence to."

A search of the instant application fails to find any strict, clear, or limiting definition of either "sequence correspondence to" or "complementary to" such that one of skill would be

adequately apprised of the metes and bounds of claim 106 as compared to claims claims 76-78, 81, 86-88 and, 91.

Thus, it is unclear how or if claim 106 further limits the invention.

Clarification and/or correction is required.

Claim Rejections - 35 USC § 112—new

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 76–78, 81, 86–88, 91, 106, 108, 110, 112, and 115–123 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Base claims 76–78, 81, 86–88, 91, 110, and 112 recite isolated double-stranded RNAs of from 21 to 23 nucleotides, in the form of two separate RNA strands which are not covalently linked, that have sequence correspondence to an mRNA. (Dependent claims 106, 108, and 115–123 are rejected for the reasons that follow due to their dependence on these base claims).

The scope and meaning, metes and bounds of the limitation "correspondence to an mRNA" are unclear. The term "correspondence to" is a relative term which renders the claim indefinite, since neither the claims nor the specification provide a clear, limiting definition of the limitation "correspondence to an mRNA" such that one of ordinary skill in the art would be reasonably apprised of the scope of the invention.

A review of the specification finds only the following. The specification at page 3, lines 15-20, states that, with regard to siRNAs used in the invention, "It is not necessary that there be

perfect correspondence of the sequences, but the correspondence must be sufficient to enable the RNA to direct RNAi cleavage of the target mRNA."

The relation distinction between "correspondence," "complementarity," and "identity," as used in the art is not set forth in the application. In addition, the minimum sequence correspondence, or complementarity necessary to enable RNAi is not set forth in the application. Thus, the 21-23 nucleotide dsRNA structures included or excluded from the instant invention are unclear since the scope and meaning of the term "correspondence to" is unclear.

It appears, then, that, absent evidence to the contrary, and for purposes of this examination, imperfectly matched sequences—sequences lacking less than 100% complementarity with the target mammalian mRNA—are within the scope of the invention.

Clarification and/or correction is required.

***

Claims 86, 88, 106, 108, 112, and 115–123 are further rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention because the limitation "wherein cleavage is directed within the region of sequence correspondence" lacks clear antecedent basis in the claims.

The ambiguity stems from base claims 86, 88, and 112, drafted in a product-by-process, which recite a step for producing the isolated dsRNAs by cleavage of dsRNA, stating that the isolated RNA is obtained from double-stranded RNA that has been "cleaved into fragments." Accordingly, the antecedent basis of "cleavage" in the "wherein" phrase at the end of the claims,

is not entirely clear. Dependent claims 106, 108, and 115–123 are rejected for the same reasons therefor.

Clarification and/or correction is required.

Claim Rejections - 35 USC § 102/103—new

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 76–78, 81, 86–88, 91, 106, 108, and 117 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Manche et al. (1992) *Molecular and Cellular Biology* 12:5238–5248, as evidenced by Stratagene pBluescript II Phagemid Vectors Instruction Manual for Catalog # 212207, downloaded from the Stratagene, Inc. website on January 11, 2007 (copy enclosed), and a Basic Local Alignment Search Tool (BLAST) analysis, available through NCBI, of nucleic acid sequence "cccggtacccagcttttgttccc" completed on January 11, 2007 (results enclosed).

Representative, independent claim 76 recites an isolated double-stranded RNA of from 21 to 23 nucleotides, in the form of two separate RNA strands which are not covalentlv linked, that has sequence correspondence to an mRNA and mediates RNA interference by directing cleavage of the mRNA to which it corresponds, wherein cleavage is directed within the region of sequence correspondence with the isolated RNA, and wherein the mRNA is mammalian cellular mRNA.

Manche et al. teach the production and isolation of a series of short, double stranded RNAs for use in a study of the interaction and activation of the interferon-induced protein kinase DAI. With regard to the instant claims, Manche et al. teach a 23-nucleotide double stranded RNA at page 5239 (see the *Hae* III fragment in Fig. 1; see also Materials and Methods, pp. 5239-40; and Characteristics of synthetic dsRNA, pp. 5240-1).

For example, at page 5240, Manche et al. state that "Duplexed RNAs of defined sizes were made by annealing a 358-nt transcript synthesized by T7 RNA polymerase with complementary transcripts of various lengths synthesized by T3 RNA polymerase (Fig. 1A). After digestion of the RNA tails and residual single-stranded RNA, the dsRNAs were purified by electrophoresis in nondenaturing polyacrylamide gels. When analyzed in denaturing conditions (Fig. 1B), the individual strands of the dsRNA molecules were slightly heterogeneous, with chain lengths a few nucleotides longer or shorter than the input single strands as a result of the trimming process. When examined in a nondenaturing gel, however,the dsRNAs migrated as discrete bands, with mobilities similar to those of dsDNA markers (see Fig. SA, lanes 3 to 9). As expected, the duplexes were sensitive to digestion with RNase III, a dsRNA-specific enzyme, but resistant to digestion by single-stranded specific nucleases except after denaturation (data not shown)."

Accordingly, the short dsRNAs are taught as being isolated and used systematically, in a substantially purified form to study their effect, if any, in a DAI kinase activation assay. Manche et al. teach that 23-mers only slightly activate DAI, whereas full activity was approached with 55- to 85-bp dsRNAs (page 5240 and Fig. 2, page 5241).

While Manche et al. do not specifically teach the sequence of the isolated short dsRNAs, nor provide any suggestion that the isolated short dsRNAs will or will not inhibit the expression of a mammalian gene, Manche et al. teach that the the plasmid pBSII KS+, from Stratagene, Inc., La Jolla, Calif. Was used as the source of the short dsRNAs. More specifically, the dsRNAs were produced by restriction endonuclease digestion of the multiple cloning site region to produce templates for in vitro transcription. The transcribed products were then purified and annealed, and then digested with RNase to produce the dsRNAs used in the study (see materials and methods, pp. 5239-5240, and Fig. 1B).

The pBSII KS+ vector appears to correspond to the pBluescript II KS (+), described on page 4 of the Stratagene pBluescript II Phagemid Vectors Instruction Manual, available online from the Stratagene website (copy enclosed). Based on the multiple cloning site map, provided at page 4 of the Manual, it appears that the *Hae* III fragment of the vector consists of the sequence "cccggtacccagcttttgttccc." *Hae* III appears to cut just 5' of the *Kpn* I site at the "ggcc" palindrome.

A BLAST analysis of this sequence against the refseq_rna database shows that the sequence shares substantial "correspondence to" a number of rat, mouse, and human mRNAs, including Homo sapiens methyltransferase 11 domain containing 1 (METT11D1), transcript variant 2, mRNA (see, for example, page 7 of 12 of the BLAST search results, enclosed).

Accordingly, while Manche et al. is silent as to the RNA interference properties, if any, of the disclosed 23-nucleotide double stranded RNA, Manche et al. is considered to inherently disclose a 23-nucleotide dsRNA that "has sequence correspondence" and complementarity to a mammalian cellular mRNA, as required by the instant claims. Given that sequence correspondence and/or complementarity is an essential feature of interfering dsRNAs insofar as their ability to sequence-specifically inhibit gene expression and act as a guide for the RISC, it would appear that Manche et al. teach a dsRNA product that meets each of the structural limitations of the instant claims.

Though silent as to an inherent property, Manche et al. need not teach or recognize this inherent feature to anticipate and/or render obvious the instant claims, since, as set forth in MPEP §2112, "There is no requirement that a person of ordinary skill in the art would have recognized the inherent disclosure *at the time of invention*, but only that the subject matter is in fact inherent in the prior art reference. *Schering Corp. v. Geneva Pharm. Inc.*, 339 F.3d 1373, 1377, 67 USPQ2d 1664, 1668 (Fed. Cir. 2003)."

And although the Manche et al. 23-mer does not appear to share 100 % identity and/or sequence complementarity with a mammalian mRNA, a substantial portion of the 23-mer does match or is complementary to several mammalian mRNAs (see pages 3 and 4, for example). This finding, along with the teaching in the specification at page 3, lines 15-20, that, with regard to siRNAs used in the invention, "It is not necessary that there be perfect correspondence of the sequences, but the correspondence must be sufficient to enable the RNA to direct RNAi cleavage of the target mRNA" is considered to be sufficient to indicate that there is a basis in fact to support the determination that the dsRNA disclosed by Manche et al. is inherently RNAi

competent against at least one mammalian mRNA as shown in the accompanying BLAST analysis (MPEP §2112, Section IV).

Accordingly, the 23-nucleotide disclosed by Manche et al. appears to meet the requirements of the instant claims.

Therefore, in the absence of convincing evidence to the contrary, Manche et al. is considered to anticipate and/or render obvious the instant claims. See MPEP §2112.

As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith." *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972) (MPEP §2113).

In the instant case, the Office is not equipped with a laboratory to manufacture and verify the RNAi competency of perfectly or imperfectly matched sequences found in the prior art.

MPEP §2112 Requirements of Rejection Based on Inherency; Burden of Proof
A REJECTION UNDER 35 U.S.C. 102/103 CAN BE MADE WHEN THE PRIOR ART PRODUCT SEEMS TO BE IDENTICAL EXCEPT THAT THE PRIOR ART IS SILENT AS TO AN INHERENT CHARACTERISTIC

> Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection. "There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977). This same rationale should also apply to product, apparatus, and process claims claimed in terms of function, property or characteristic. Therefore, a 35 U.S.C. 102/103 rejection is appropriate for these types of claims as well as for composition claims.

A REFERENCE TEACHING PRODUCT APPEARING TO BE SUBSTANTIALLY IDENTICAL IS MADE THE BASIS OF A REJECTION, AND THE EXAMINER PRESENTS EVIDENCE OR REASONING TENDING TO SHOW INHERENCY, THE BURDEN SHIFTS TO THE APPLICANT TO SHOW AN UNOBVIOUS DIFFERENCE

"[T]he PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]." The burden of proof is similar to that required with respect to product-by-process claims. *In re Fitzgerald,* 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting *In re Best,* 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

Claims 78, 86, 88, 110, and 112 are drafted in the product-by-process format. Even though the reference may not describe the production of the molecule using the methods identical to that recited in the claims, the recitation of a process limitation in the instant claims is not viewed as positively limiting the claimed product absent a showing that the process of making recited in the instant claims imparts a novel or unexpected property to the claimed product, as it is assumed that equivalent products are obtainable by multiple routes. The burden is placed upon the applicants to establish a patentable distinction between the claimed and disclosed prior art products.

The method in which the isolated RNAs were produced is immaterial to their patentability. "Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re* Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985). See also MPEP 2113.

Conclusion

No claims are allowable.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis V. Wollenberger whose telephone number is 571-272-8144. The examiner can normally be reached on M-F, 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Schultz can be reached on (571)272-0763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LVW
Examiner Art Unit 1635
January 11, 2007

SEAN McGARRY
PRIMARY EXAMINER
AU 1635